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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
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10/625,643

07/24/2003

Shinichiro Fujita

116668

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25944

7590

11/15/2006

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EXAMINER

BRADLEY, MATTHEW A

ART UNIT

PAPER NUMBER

2187

DATE MAILED: 11/15/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

<b>Office Action Summary</b>	Application No.	Applicant(s)	
	10/625,643	FUJITA ET AL.	
	Examiner	Art Unit	
	Matthew Bradley	2187	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

#### Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

#### Status

- 1) ☒ Responsive to communication(s) filed on 22 August 2006.
- 2a) ☐ This action is **FINAL**.                      2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

#### Disposition of Claims

- 4) ☒ Claim(s) 1-7 and 9 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-7,9 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

#### Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

#### Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All    b) ☐ Some \*    c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
  2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

#### Attachment(s)

- |  |   |
|--|---|
| 1) <input type="checkbox"/> Notice of References Cited (PTO-892)                     | 4) <input type="checkbox"/> Interview Summary (PTO-413)           |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | Paper No(s)/Mail Date. _____                                      |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08)          | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| Paper No(s)/Mail Date _____  | 6) <input type="checkbox"/> Other: _____                          |

## **DETAILED ACTION**

### ***Continued Examination Under 37 CFR 1.114***

A request for continued examination under 37 CFR 1.114, including the fee set forth in 37 CFR 1.17(e), was filed in this application after final rejection. Since this application is eligible for continued examination under 37 CFR 1.114, and the fee set forth in 37 CFR 1.17(e) has been timely paid, the finality of the previous Office action has been withdrawn pursuant to 37 CFR 1.114. Applicant's submission filed on 22 August 2006 has been entered.

### ***Claim Status***

Claims 1-7 and 9 remain pending and are ready for examination.

### ***Specification***

The objection to the specification set forth in the Office Action dated 22 May 2006 has been withdrawn in light of the instant amendment.

### ***Claim Objections***

Claim 9 is objected to under 37 CFR 1.75(c), as being of improper dependent form for failing to further limit the subject matter of a previous claim. Applicant is required to cancel the claim(s), or amend the claim(s) to place the claim(s) in proper dependent form, or rewrite the claim(s) in independent form. Insofar as it appears to be clear, claim 9 recited a second device connected to the second bus. Claim 9 is dependent on claim 1 wherein claim 1 positively recites, as amended, a second device.

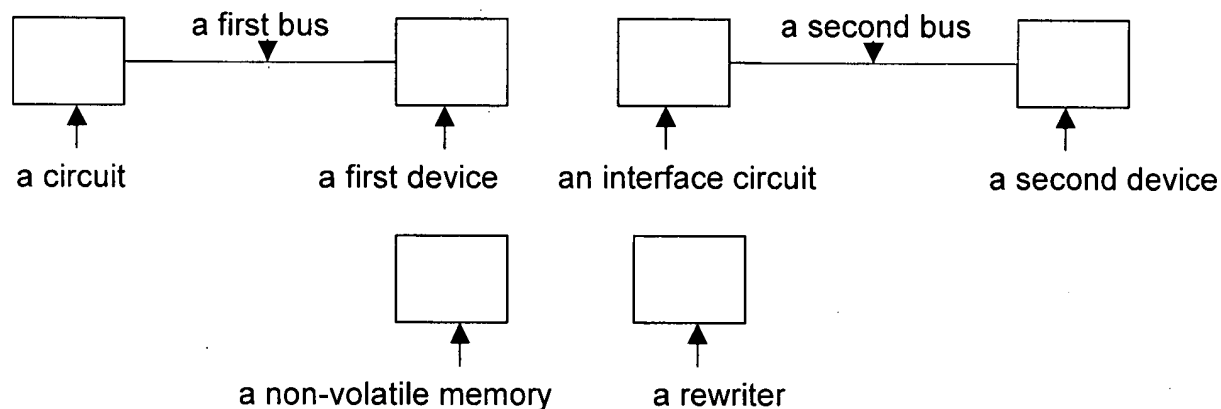
***Claim Rejections - 35 USC § 112***

The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

Claims **1-7** and **9** are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

The Examiner would like to illustrate, in the form of the picture shown *infra*, how the Examiner is interpreting the instant claim language insofar as it appears to be clear:



As amended, independent claim 1 recites, 'the rewriter loading and writing information transferred from the first device through the first bus into a rewrite area of the non-volatile memory when the rewriter is activated by the rewriter activation section.' This is indefinite. As shown *supra*, the non-volatile memory is not connected or coupled to anything. The Examiner is unsure how information can be transferred from the first device through the first bus **into a rewrite area of the non-volatile memory** when there appears to be no positive recitations of connections or couplings to the non-volatile memory.

Further, as amended, independent claim 1 recites, 'when the second bus is detected to have a connection to the second device, the circuit performing packet transfer through the first bus conforming to a first interface standard...' This is indefinite. As shown *supra*, there appears to be no positive recitation of a connection or coupling that would allow the circuit to discover that the second bus is connected to a second device. Therefore, the Examiner is unsure how the circuit can begin packet transfer without such connection or coupling.

Additionally, independent claim 1 recites, 'the rewriter activation section activating the rewriter to start processing when the second bus is detected to have no connection to **any device**' (emphasis added). This is indefinite. If the second bus is not connected to **any device**, how can the rewriter (broadly interpreted as a device) start processing if it is not connected to discover such disconnect or total lack of connection thereof?

Claims 2-7 and 9 are rejected to at least by virtue of their dependency.

***Claim Rejections - 35 USC § 102***

Claims 1-7 and 9 are rejected under 35 U.S.C. 102(b) as being anticipated by Bartholomew et al (U.S. 5,978,591) hereinafter referred to as Bartholomew. The instant 35 U.S.C. 102(b) rejections are made in view of the 5 U.S.C. 112 2<sup>nd</sup> rejections as noted *supra*.

As per independent claim 1, Bartholomew teach,

- a circuit which is connected to a first bus, the first bus being connectable to a first device; (Column 9 lines 61-64).

- an interface circuit which is connectable to a second bus, the second bus being connectable to a second device; (Column 10 lines 1-4)
- a non-volatile memory which stores at least one of device information and data transfer control program information; (Column 8 lines 29-34)
- a rewriter; and (Column 7 line 61 to Column 8 line 2)
- a rewriter activation section, the rewriter activation section activating the rewriter to start processing when the second bus is detected to have no connection to any device, (Column 7 lines 36-39 with respect to Figure 8 described in Column 9 lines 51 to Column 10 line 8),
- the rewriter loading and writing information transferred from the first device through the first bus into a rewrite area of the non-volatile memory when the rewriter is activated by the rewriter activation section, (Column 7 lines 26-48)
- when the second bus is detected to have a connection to the second device, the circuit performing packet transfer through the first bus conforming to a first interface standard and the interface circuit performing interface processing with the second device conforming to a second interface standard (Column 6 lines 13-39).

As per dependent claim 2, Bartholomew teach,

- The data transfer control device as defined in claim 1, wherein the detection of whether or not the second bus is connected to the second

device is based on the result of an access to a register of the second device (Column 7 lines 39-44).

As per dependent claim 3, Bartholomew teach,

- The data transfer control device as defined in claim 1, wherein the rewriter writes information into the rewrite area by performing data transfer between the data transfer control device and the first device connected to the first bus in a mode of loading information to the rewrite area (Column 7 lines 44-48).

As per dependent claim 4, Bartholomew teach,

- The data transfer control device as defined in claim 1, wherein data transferred from the first device through the first bus is transferred to a second device through the second bus, and data transferred from the second device through the second bus is transferred to the first device through the first bus, in an ordinary operating mode that differs from a mode of loading information to the rewrite area (Figure 8 with respect to data transfer discussed in the rejection to claim 1 made supra).

As per dependent claim 5, Bartholomew teach,

- The data transfer control device as defined in claim 1, wherein the device information includes identification information that is specific to an electronic instrument in which the data transfer control device is embedded (Column 8 lines 29-34).

As per dependent claim 6, Bartholomew teach,

- The data transfer control device as defined in claim 1, wherein the non-volatile memory has an area in which is stored information for indicating whether or not the data transfer control program information has been written correctly into the rewrite area (Column 7 lines 44-48). *The Examiner is interpreting the "Code Update" string to be acknowledgement of whether or not the data transfer control program was written correctly. This is further taught and shown in Column 7 lines 49-52*

As per dependent claim 7, Bartholomew teach,

- The data transfer control device as defined in claim 1, wherein: the non-volatile memory has an area in which is stored rewriter processing setting information for setting whether processing by the rewriter is enabled or disabled; and the rewriter processing setting information is set to enabled in an initial state but is set to disabled at the end of processing by the rewriter (Column 6 lines 36-39). *The Examiner notes that at the end of the reprogramming stage, execution is passed to the newly installed application code in the memory. The act of passing execution from the reprogramming stage to the application code, is effectively disabling the reprogrammer and is accordingly disabling the reprogrammer so that execution can then continue.*



Art Unit: 2187

As per dependent claim 9, Bartholomew teach,

- o An electronic instrument comprising: the data transfer control device as defined in claim 1; and a second device connected to the second bus (Column 9 line 51 to Column 10 line 8).

### ***Response to Arguments***

Applicant's arguments filed 22 August 2006 have been carefully and fully considered but are not persuasive.

With respect to applicant's argument located within the last paragraph of the second page of the remarks (numbered as page 7) continuing to the third page of the remarks (numbered as page 8) which recites:

*"Thus, according to claim 1, the detection of whether or not the device is connected to the second bus occurs before information is downloaded through the first bus. Whereas, according to Bartholomew, the detection of whether or not the host computer has been disconnected from the first bus occurs after the reprogramming data has been downloaded through the first bus."*

The Examiner respectfully disagrees. This is not commensurate in scope with the claim language. Claim 1 recites a rewriter activation section that starts processing when the second bus is detected to have no connection to any device. The rewriter then loads and writes information transferred from the first device through the first bus into a rewrite area of the non-volatile memory when the rewriter is activated by the rewriter activation section. This is taught by Bartholomew in Column 7 lines 26-48 specifically as where the installation stage does not begin until the personal information device card is removed (detected to have no connection) from the computer.

Further, claim 1 recites when the second bus is detected to have a connection to the second device, the circuit performing packet transfer through the first bus conforming to a first interface standard and the interface circuit performing interface processing with the second device conforming to a second interface standard. This is taught by Bartholomew in Column 6 lines 13-39 as the downloading stage that occurs when the personal information device is inserted (detected to have a connection) into the host computer.

### ***Conclusion***

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Matthew Bradley whose telephone number is (571) 272-8575. The examiner can normally be reached on 6:30-3:00 M-F.

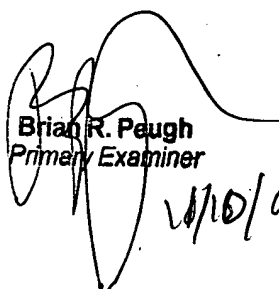
If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Donald A. Sparks can be reached on (571) 272-4201. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Art Unit: 2187

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

BRP/mb

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Brian R. Paugh  
Primary Examiner  
10/10/06